



Taxonomy and antifungal susceptibility of clinically important *Rasamsonia* species

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Résumé en anglais	<p>In recent years, <i>Geosmithia argillacea</i> has been increasingly reported in humans and animals and can be considered an emerging pathogen. The taxonomy of <i>Geosmithia</i> was recently studied, and <i>Geosmithia argillacea</i> and related species were transferred to the new genus <i>Rasamsonia</i>. The diversity among a set of <i>Rasamsonia argillacea</i> strains, including 28 clinical strains, was studied, and antifungal susceptibility profiles were generated. Data obtained from morphological studies and from phylogenetic analyses of internal transcribed spacer (ITS) and partial β-tubulin and calmodulin sequences revealed the presence of four species in the <i>Rasamsonia argillacea</i> complex, two of which are newly described here: <i>R. piperina</i> sp. nov. and <i>R. aegroticola</i> sp. nov. In contrast to other related genera, all <i>Rasamsonia</i> species can be identified with ITS sequences. A retrospective identification was performed on recently reported clinical isolates from animal or human patients. Susceptibility tests showed that the antifungal susceptibility profiles of the four members of the <i>R. argillacea</i> complex are similar, and caspofungin showed significant activity in vitro, followed by amphotericin B and posaconazole. Voriconazole was the least active of the antifungals tested. The phenotypically similar species <i>R. brevistipitata</i> and <i>R. cylindrospora</i> had different antifungal susceptibility profiles, and this indicates that correct species identification is important to help guide appropriate antifungal therapy.</p>
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